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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,353	01/12/2006	Yukio Umemura	062709-0160	9085
22428 7590 08/20/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
ALTUN, NURI B				
ART UNIT		PAPER NUMBER		
4165				
MAIL DATE		DELIVERY MODE		
08/20/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/564,353

**Applicant(s)**

UMEMURA, YUKIO

**Examiner**

Nuri Boran ALTUN

**Art Unit**

4165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) 2-10 and 12-16 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 11, 17 and 18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 12 January 2006.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This communication is a first Office Action Non-Final rejection on the merits.

Claims 1-18, as originally filed, are currently pending and have been considered below.

#### *Election/Restrictions*

1. Applicant's election without traverse of **Species B and Sub-Species VII** (claims 1, 11, 17 and 18) in the reply filed on 07/25/2008 is acknowledged.
2. **Claims 2-10 and 12-16** are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/15/2008.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims **1, 11, 17 and 18** are rejected under 35 U.S.C. 102(b) as being anticipated by **Kimura et al. (EP 1,207,316)**.

**As per claim 1**, Kimura et al. teach a power transmission device comprising:

a first transmission member (32) rotatably attached at a boss portion of a housing (2, 4) of a compressor;

a second transmission member (35b) fixed to an end portion of a rotary shaft (6) passing loosely through the boss portion (see Fig. 2);

a first pin (38) mounted on one of the first transmission member and the second transmission member (col.6 line 58 – col.7 line 2, see Fig. 2, 3 and 7);

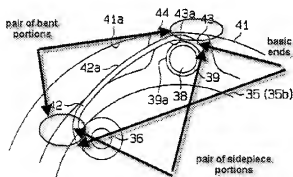
a second pin (36) mounted on the other of the first transmission member and the second transmission member (col.6, lines 49-51, see Fig. 2, 3 and 7); and

a coupling member (42) coupling the first pin with the second pin to transmit power from the first transmission member to the second transmission member (col.7, lines 22-29, see Fig. 5 and 6) and

cutting off the power transmission when a torque load applied to the first pin exceeds a given value (col.10 line 52 – col. 11 line 7),

wherein the coupling member comprising:

a pair of sidepiece portions disposed parallel to each other (see below);



a pair of bent portions having free ends, basic ends joined integrally to first ends of the sidepiece portions respectively (see Figure above) and

sandwich portions (44) supporting the first pin by sandwiching (see Figures 5 and 6),

wherein each of the sandwich portions comprising:

plural projections disposed at regular intervals one another (col.6, lines 51-53) in a circumferential direction of the first pin (see Fig. 5) and contacted with the outside circumferential surface of the first pin; and plural surfaces each disposed between the adjacent projections and opposed to the outside circumferential surface of the first pin at a regular distance (col.7 line 51 – col.8 line 1; since it is compressed between the outer side and the restricting surface, it is construed that sandwich portions contacts outside surface of the first pin); and

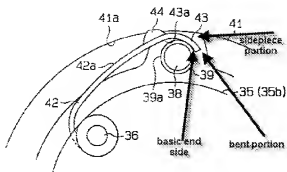
a curved portion having both ends joined integrally to second ends of the sidepiece portions respectively (see Fig. 6) and

a hole (1a) through and into which the second pin is passed and fitted (see figure 1),

wherein the first pin is sandwiched between the sandwich portions by inserting the first pin into a spacing between the sidepiece portions and then pressing the first pin toward the bent portion side to deform the bent portions in a direction away from each other (col.6, lines 49-55; the phrase 'securely fitted' is interpreted as being pressed and sandwiched; col. 16, lines 31-36) and

the first pin is released from the coupling member when the torque load applied to the first pin exceeds a given value (col. 15, lines 42-45).

**As per claim 11**, Kimura et al. teach an inside surface of the sidepiece portion is smoothly joined to the projection located on the basic end side of the bent portion (see figure below).



**As per claim 17**, Kimura et al teach a method for manufacturing a power transmission device, comprising the steps of:

fitting a second pin (36) into a hole of a coupling member (42) (col.7, lines 24-26)

wherein the second pin is mounted on one of a first transmission member and a second transmission member (see Fig. 2 and 3);

inserting a first pin (38) into a spacing of the coupling member (col.7, lines 33-37; since coupling member projects outward from the pin, it is construed that first pin is inserted into the spacing)

wherein the first pin is mounted on the other of the first transmission member (32) and the second transmission member (35b) (see Fig. 2 and 3);

fastening the transmission member on which the second pin is mounted (col.7, lines 25-26) ; and

sandwiching the first pin between sandwich portions of the coupling member by rotating the transmission member on which the first pin is mounted to move the first pin toward an open end side of the spacing. (col.7, lines 24-29 and see Fig. 2 and 3; since coupling member forms a curve projecting radially outwardly of the first transmission member, it is construed that first pin is sandwiched and transmission member is rotated

and formed a curve to move the first pin toward an open end on the first transmission member side)

**As per claim 18**, Kimura et al. teach a compressor comprising:

a housing (2, 4);

a boss portion formed at end portion of the housing (see Fig. 2);

a rotary shaft (6) passing loosely through the boss portion (see Fig. 2); and

a power transmission device (PT) transmitting deriving force of an engine to the rotary shaft (col.4, lines 53-58),

wherein the power transmission device comprising:

a first transmission member (32) rotatably attached at the boss portion;

a second transmission member (35b) fixed to an end portion of the rotary shaft (6);

a first pin (38) mounted on one of the first transmission member and the second transmission member (col.6 line 58 – col.7 line 2, see Fig. 2, 3 and 7);

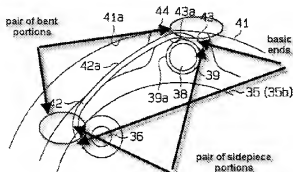
a second pin (36) mounted on the other of the first transmission member and the second transmission member (col.6, lines 49-51, see Fig. 2, 3 and 7);

and a coupling member (42) coupling the first pin with the second pin to transmit power from the first transmission member to the second transmission member (col.7, lines 22-29, see Fig. 5 and 6) and

cutting off the power transmission when a torque load applied to the first pin exceeds a given value (col.10 line 52 – col. 11 line 7),

wherein the coupling member comprising:

a pair of sidepiece portions disposed parallel to each other (see figure below);



a pair of bent portions respectively having free ends, basic ends joined integrally to first ends of the sidepiece portions respectively (see figure above) and

sandwich (44) portions supporting the first pin by sandwiching (see Figures 5 and 6)

wherein each of the sandwich portions comprising:

plural projections disposed at regular intervals one another (col.6, lines 51-53) in a circumferential direction of the first pin (see Fig. 5) and contacted with the outside circumferential surface of the first pin; and plural surfaces each disposed between the adjacent projections and opposed to the outside circumferential surface of the first pin at a regular distance (col.7 line 51 – col.8 line 1; since it is compressed between the outer side and the restricting surface, it is construed that sandwich portions contacts outside surface of the first pin); and

a curved portion having both ends joined integrally to second ends of the sidepiece portions respectively (see Fig. 6) and

having a hole (1a) through and into which the second pin is passed and fitted (see Figure 1),



wherein the first pin is sandwiched between the sandwich portions by inserting the first pin into a spacing between the sidepiece portions and then

pressing the first pin toward the bent portion side to deform the bent portions in a direction away from each other (col.6, lines 49-55; the phrase 'securely fitted' is interpreted as being pressed and sandwiched; col. 16, lines 31-36) and

the first pin is released from the coupling member when the torque load applied to the first pin exceeds a given value (col. 15, lines 42-45).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference Kawachi (6,500,085) teaches a mechanical device for transmitting power with similar features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nuri Boran ALTUN whose telephone number is (571) 270-5807. The examiner can normally be reached on Mon-Fri 7:30 - 5:00 with first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on 571 272 6782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NBA

/Lynda Jasmin/  
Supervisory Patent Examiner, Art Unit 4165